ABSTRACT OF THE DISCLOSURE

A data stream is encrypted to form encryption units that are packetized into RTP packets. Each RTP packet includes an RTP packet header, one or more payloads of a common data stream, and a RTP payload format header for each payload and including, for the corresponding encryption units, a boundary for the payload. The payload can be one or more of the encryption units or a fragment of one of the encryption units. The encryption units are reassembled the using the payloads in the RTP packets and the respective boundary in the respective RTP payload format header. The reassembled of encryption units are decrypted for rendering. Each RTP payload format header can have attributes for the corresponding payload that can be used to render the payload. The RTP packets can be sent server-to-client or peer-to-peer.